WE CLAIM:

1. A compound comprising the formula:

$$G = (C)_{h} - [M_{1}]_{a} = (C)_{b} - [M_{2}]_{a} = (M_{2})_{a} = (M_{3})_{b} - (M_{4})_{c} - (M_{$$

wherein:

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G is a linear or branched polymer residue;

 Y_1 and Y_2 are independently O, S, or NR_9 ;

 M_1 - M_3 are independently O, S, or NR_{100}

 M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

B is a residue of an amine-containing moiety or a residue of a hydroxylcontaining moiety;

 R_{1-10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

- - 2. The compound of claim 1, wherein G includes a capping group A, selected from the group consisting of hydrogen, CO₂H, C₁₋₆ alkyl moieties, and

$$\begin{array}{c} Y_{2} \\ \parallel \\ B-C-[M_{4}]_{i}-\begin{bmatrix} R_{5} \\ C \\ R_{6} \\ \end{bmatrix}_{i} \begin{bmatrix} R_{3} \\ C \\ R_{4} \\ e \\ g \end{bmatrix}_{g} \begin{bmatrix} M_{2} \end{bmatrix}_{d}-\begin{bmatrix} R_{1} \\ \parallel \\ C \\ R_{2} \end{bmatrix}_{c} \begin{bmatrix} Y_{1} \\ \parallel \\ C \\ \end{bmatrix}_{b} \begin{bmatrix} R_{7} \\ \parallel \\ R_{8} \end{bmatrix} \tag{II'}$$

3. A compound of claim 2, of the formula:

$$\begin{array}{c}
Y_{2} \\
B-C-[M_{4}]_{i}-\begin{bmatrix}R_{5}\\C\\R_{6}\\A\end{bmatrix} = \begin{bmatrix}M_{3}\end{bmatrix}_{f}\begin{bmatrix}R_{3}\\C\\R_{4}\\E\end{bmatrix}_{g}\begin{bmatrix}M_{2}\end{bmatrix}_{d}\begin{bmatrix}R_{1}\\C\\R_{2}\end{bmatrix}_{c}\begin{bmatrix}Y_{1}\\C\\R_{2}\end{bmatrix}_{c}\begin{bmatrix}M_{1}\end{bmatrix}_{a}\begin{bmatrix}C\\C\\A\end{bmatrix}_{b}$$

$$\begin{array}{c}R_{7}\\C\\R_{2}\\C\\R_{8}\end{array}$$

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$$\begin{array}{c}R_{7}\\C\\R_{8}\\$$

$$- \left\{ \begin{array}{c} R_7 \\ I \\ C \\ I \\ R_8 \end{array} \right]_{c} \left[\begin{array}{c} X_1 \\ Y_2 \\ I \\ R_2 \end{array} \right]_{c} \left[\begin{array}{c} R_3 \\ I \\ I \\ R_4 \end{array} \right]_{e} \left[\begin{array}{c} R_5 \\ I \\ I \\ R_6 \end{array} \right]_{h} \left[\begin{array}{c} Y_2 \\ I \\ I \\ I \\ I \end{array} \right]_{e}$$

- 10 4. The compound of claim 1, wherein a, b, c, d, e, f, g, h, i and n are independently zero, one or two.
 - 5. The compound of claim 1, wherein Y_1 and Y_2 are both O.
 - The compound of claim 1, wherein M_2 is NH and d is one.
 - 7. The compound of claim 1, wherein R_7 and R_8 are both H.
- The compound of claim 1, wherein n is 1.
 - 9. The compound of claim 1, wherein a is 0.
 - 10. The compound of claim 1, wherein a is 1.
 - 11. The compound of claim 1, wherein c is 0.
 - 12. The compound of claim 1, wherein g is 2, M_3 is O, e is 2, f is 1 and
- 20 R₃ and R₄ are H.

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- 13. The compound of claim 12, wherein b, d, h and n are 1, R_5 and R_6 are H and M_2 is NH.
- 14. The compound of claim 12, wherein h, d and n are 1, M_2 is NH and R_3 and R_4 are H.
- 25 The compound of claim 1, wherein B is a residue of an amine containing moiety.

16. The compound of claim 15, wherein said amine-containing moiety is

wherein

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 R_{12-13} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls;

 R_{14-18} are independently selected from alkoxy, e.g. OR_{19} or, in the alternative, H, OH, N₃, NHR₂₀, NO₂ or CN, fluoro, chloro, bromo, iodo, where R_{19-20} are independently selected from the same group which defines R_{12-13} .

- 17. The compound of claim 1, wherein G is O-(CH₂CH₂O)_x or O-(CH(CH₃)CH₂O)_x, wherein x is the degree of polymerization.
- 18. The compound of claim 17, wherein G is O-(CH₂CH₂O)_x and x is a positive integer selected so that the weight average molecular weight is at least about 20,000.
 - 19. The compound of claim 18, wherein G has a weight average molecular weight of from about 20,000 to about 100,000.
- 20. The compound of claim 21, wherein G has a weight average molecular weight of from about 25,000 to about 60,000.

22. A compound of claim 3, selected from the group consisting of:

$$G-CH_2-C-NH-(CH_2-CH_2-O)_2-CH_2-C-B$$

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$$G-CH_2-C-NH-CH_2-CH_2-C-B \qquad and \qquad S$$

15 24. A compound of claim 3, selected from the group consisting of:

- 25. A method of preparing a polymeric conjugate, comprising:
- a) reacting a biologically active moiety having an unprotected amine or hydroxyl group with a compound of the formula

$$B_{2}[M_{2}]_{d} = \begin{bmatrix} R_{3} \\ C \\ I \\ R_{4} \end{bmatrix}_{e} \begin{bmatrix} M_{3} \\ C \\ I \\ R_{6} \end{bmatrix}_{h} \begin{bmatrix} Y_{2} \\ II \\ K_{4} \end{bmatrix}_{r-C-B_{1}}$$
 (III)

wherein

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B₁ is a leaving group capable of reacting with an unprotected amine or hydroxyl group;

B₂ is a cleavable protecting group;

 Y_2 is O, S, or NR_9 ;

 M_2 - M_3 are independently O, S, or NR_{10} ,

 M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

 $R_{3.6}$, R_9 and R_{10} are independently selected from the group consisting of hydrogen, $C_{1.6}$ alkyls, $C_{3.12}$ branched alkyls, $C_{3.8}$ cycloalkyls, $C_{1.6}$ substituted alkyls, $C_{3.8}$ substituted cycloalkyls, aryls, substituted aryls, aralkyls, $C_{1.6}$ heteroalkyls and substituted $C_{1.6}$ heteroalkyls;

d, e, f, g, h, and i are each independently zero or a positive integer; to form a protected intermediate of the formula:

$$B_{2}[M_{2}]_{d} \left\{ \begin{bmatrix} R_{3} \\ C \\ I \\ R_{4} \end{bmatrix}_{e} \begin{bmatrix} M_{3} \\ I \\ R_{6} \end{bmatrix}_{h} \begin{bmatrix} R_{5} \\ I \\ R_{6} \end{bmatrix}_{h} \begin{bmatrix} Y_{2} \\ I \\ I \\ I \\ I \end{bmatrix} \right\}$$
 (IV)

wherein

B is a residue of an amine-containing moiety or a residue of a hydroxylcontaining moiety;

- b) deprotecting the resultant intermediate by removing B2; and
- c) reacting the deprotected intermediate with a compound of the formula

$$G = \begin{pmatrix} R_7 \\ I \\ C \end{pmatrix}_{n} - [M_1]_a - \begin{pmatrix} Y_1 \\ Y_1 \\ C \end{pmatrix}_b \begin{bmatrix} R_1 \\ C \\ R_2 \end{bmatrix}_c \qquad (V)$$

$$R_8$$

wherein

5 B_3 is a leaving group;

G is a polymer residue;

 Y_1 is O, S, or NR₉;

 M_1 is O, S, or NR_{10} ;

R₁, R₂, R₇, R₉ and R₁₀ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

a, b and c are each independently zero or a positive integer, whereby a polymeric conjugate is formed.

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A method of preparing a polymeric conjugate, comprising:

a) reacting a polymer-spacer intermediate of the formula

$$G = (C)_{n} - [M_{1}]_{a} - (C)_{b} - [M_{2}]_{d} + (C)_{e} - [M_{3}]_{f} - (C)_{e} - [M_{4}]_{e} - (C)_{e} - [M_{4}]_{e} - (C)_{e} -$$

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wherein

 B_1 is a leaving group capable of reacting with an unprotected amine or hydroxyl group;

G is a polymer residue;

 Y_1 and Y_2 are independently O, S, or NR₉;

M₁-M₃ are independently O, S, or NR₁₀:

M₄ is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

B is a residue of an amine-containing moiety or a residue of a hydroxylcontaining moiety;

 $R_{1.10}$ are independently selected from the group consisting of hydrogen, $C_{1.6}$ alkyls, $C_{3.12}$ branched alkyls, $C_{3.8}$ cycloalkyls, $C_{1.6}$ substituted alkyls, $C_{3.8}$ substituted cycloalkyls, aryls, substituted aryls, aralkyls, $C_{1.6}$ heteroalkyls and substituted $C_{1.6}$ heteroalkyls;

a, b, c, d, e, f, g, h, i and n are each independently zero or a positive integer and thereafter reacting intermediate with a biologically active moiety having an unprotected amine or hydroxyl group to form the polymeric conjugate.

- 27. A method of treatment, comprising: administering to a mammal in need of such treatment an effective amount of a compound of claim 1, wherein B is a residue of a biologically active moiety.
- 28. A method of treatment, comprising: administering to a mammal in need of such treatment an effective amount of a compound of claim 3, wherein B is a residue of a biologically active moiety.

29. A compound of the formula:

$$B_{2}[M_{2}]_{d} \underbrace{ \begin{bmatrix} R_{3} \\ R_{4} \end{bmatrix}_{e} \begin{bmatrix} M_{3} \end{bmatrix}_{f} \begin{bmatrix} R_{5} \\ C \\ R_{6} \end{bmatrix}_{h} \begin{bmatrix} M_{4} \end{bmatrix}_{f} C B}$$
 (IV)

wherein

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B is a residue of an amine-containing moiety or a residue of a hydroxylcontaining moiety;

B₂ is a cleavable protecting group;

 Y_2 is O, S, or NR_9 ;

M₂-M₄ are independently O, S, or NR₁₀,

 M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

R_{3-6, 9 and 10} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

d, e, f, g, h, and i are each independently zero or a positive integer.

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A compound of claim 1, selected from the group consisting of:

G-CH₂-C-NH-(CH₂-CH₂-O)₂-CH₂-CH₂-O-C-B

and

$$G-CH_2-C-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-O-G-B$$

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31. A compound of claim 3, selected from the group consisting of:

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$$- \begin{cases} -CH_2 - CH_2 - CH$$

and

$$B-C-O-CH_{2}-C$$